5. The method of Claim 1, wherein X is from a range of approximately 1 to 3, wherein 1 represents low carbohydrate sensitivity and wherein 3 represents high carbohydrate sensitivity.

8. The method of Claim 1, further comprising the step of:

individualizing X to said subject based on an actual elevation of blood glucose concentration resulting from ingesting said estimated amount of carbohydrate according to:

$$X_i = \frac{OBSERVED - STARTING}{CHO},$$

where observed represents an actual blood glucose value achieved following ingestion of said estimated required amount of carbohydrate, wherein X_i represents an individualized value of X.

9. The method of Claim 8, further comprising the step of:

calculating an actual required amount of carbohydrate using X_i, wherein said actual amount comprises amount required by said subject to achieve elevation of said subject's blood glucose concentration to said target maximum.

10. The method of Claim 9, further comprising the step of:

ingesting said actual required amount of carbohydrate by said subject.

12. The method of Claim 10, further comprising the step of:

generating an individualized calibration model for said subject for use in non-invasive methods of blood glucose determination employing spectroscopic instrumentation based on idealized anti-correlated glycemic profiles produced using said formula

24. A method of predicting a required amount of carbohydrate to ingest to produce an elevation in blood glucose concentration in a subject from a starting value to a target maximum, said method comprising the steps of:

providing said target and starting values; and

estimating said required amount of carbohydrate according to a formula, said formula comprising:

$$CHO = \frac{TARGET - STARTING}{X},$$

5   where CHO represents said required amount of carbohydrate, $TARGET$ represents said target maximum, $STARTING$ represents a starting blood glucose concentration, and X comprises an assigned value representing said subject's sensitivity to carbohydrate, said assigned value based on type of diabetes and/or level of diabetes control.

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31.   The method of Claim 24, further comprising the step of:

individualizing X to said subject based on an actual elevation of blood glucose concentration resulting from ingesting said estimated required amount of carbohydrate according to:

$$X_i = \frac{OBSERVED - STARTING}{CHO},$$

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where $OBSERVED$ represents an actual blood glucose concentration achieved following ingestion of said estimated required amount of carbohydrate, and X_i represents said individualized value of X.

20   35.   A method of generating a glycemic profile in a subject having a predetermined shape, comprising the steps of:

driving said subject's blood glucose concentration to a target maximum through oral ingestion by said subject of a calculated amount of carbohydrate required to achieve said target maximum;

25   monitoring said individual's blood glucose concentration at predetermined time intervals; and

driving said subject's blood glucose to a target minimum through administration of a hypoglycemic agent;

wherein rate of change of said glucose concentration substantially

30   corresponds to a target rate; and

wherein correlation of a resulting glycemic profile to factors other than subject's blood glucose concentration is diminished or eliminated.

5   Please cancel Claims 4, 14, 16, 17 and 20 – 23 from the application without prejudice.